The controversial practice of backdating stock options to boost executive pay went hand-in-hand with poor corporate governance practices and overbearing chief executives, according to a study published today.

The research is the first to posit a link between lax internal controls and stock options backdating. The scandal has so far engulfed more than 130 US companies in internal and regulatory probes but the study suggests that number could eventually climb to 720.

The research also found that, contrary to a widespread perception, "old economy" companies used the practice almost as much as rivals in "new economy" sectors - a feature underlined by one of the most recent casualties of the scandal, Bruce Karatz, the ousted chief executive of the house builder KB Home.

The results of the study, looked at options granted by some 8,000 companies between 1996 and 2005.

"These findings are consistent with the view that grant date manipulation reflects governance problems rather than a compensation device used for valid business reasons," conclude the report's authors - Harvard Law School's Lucian Bebchuk, Yaniv Grinstein from Cornell University and INSEAD's Urs Peyer.